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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,829	04/03/2001	Christian Prehofer	P00,2004	4617
7590		09/20/2004	EXAMINER	
Brett C. Martin		SHAH, CHIRAG G		
1650 Tysons Boulevard		ART UNIT		
McLean, VA 22102		PAPER NUMBER		
		2664		

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,829

Applicant(s)

PREHOFER, CHRISTIAN

Examiner

Chirag G Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/30/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/30/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 23 objected to because of the following informalities: Claim 23, line 2, has a spelling error. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Riggan et al., hereinafter, Riggan (U.S. Patent No. 6,490,252) in view of Farris et al., hereinafter, Farris (U.S. Patent No. 6,574,216).

Referring to claim 13, Riggan discloses in 2, 3A, 3b, 4-6 of a method for re-routing data packets of a packet-switching network [ATM Network 305 of figure 2] into at least one alternate network [X.25, PSTN, an ISDN, a cable broad cast television, wireless network or a frame relay network as disclosed in column 4, lines 5-34] capable of assuring a quality [QoS] requested by a network user, the packet-switching network [ATM Network} and the at least one alternate network [X.25, PSTN, an ISDN, a cable broad cast television, wireless network or a frame relay network as disclosed in column 4, lines 5-34] form sub-networks of a network over which data packets can be transmitted, including at least source node [user interface 308 is thus coupled to

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receive data streams at input ports 310 via input lines 311 connected to source as in figure 3b] and at least one destination node [node B] that are each respectively one of either directly or indirectly connected to an access node 300a, the access node being capable of setting up a connection both to the packet switching network [ATM Network] and to one of the at least one alternate network[X.25, PSTN, ISDN, cable, wireless or frame relay network], the method comprising:

Identifying only by a respective bit pattern [traffic type, such as voice, video or data] known to the access node [300a] the data packets to be routed via an alternate network in the source node [input lines 311 connected to source as in figure 3b] by a bit pattern known [traffic type] to the access node [300a] that is connected to the source node either directly or indirectly via at least one intermediate node [as disclosed in abstract, figure 2, column 4, lines 6 to column 5, lines 24, if the signal from the NMS indicates that the QoS threshold is exceeded, then at least a first portion of the data, e.g., excess cells, are routed to node 300b via one or more of the secondary networks 212a-212c. The particular secondary network is chosen based upon the type of data, which is to be transmitted. More particularly, the voice, data and video streams may be classified according to the adaptation layer type. The traffic then directed to a secondary network, which is capable of handling traffic of the corresponding type];

Recognizing the known bit pattern [traffic type, voice, video or data] upon arrival of such data packets in the access node [as disclosed in the abstract, figure 2 and in column 4, lines 6 to 67, A plurality of user data streams are received into node 300a, functions as the access node, the user data streams may comprise data, voice or video

traffic in various synchronous and asynchronous formats. Node 300a identifies the type of traffic received and receives a signal from the NMS indicating whether or not the QoS threshold has been reached, if the traffic level is below the threshold, the node 300a adapts the received traffic into the ATM cells, establishes the appropriate virtual paths and connections, and transfers the cells to node via ATM network 305]; and

Re-routing the data packets identified with only the known bit pattern onto an alternate network [as disclosed in the abstract, figure 2 and in column 4, lines 6 to column 5, lines 24, if the signal from the NMS indicates that the QoS threshold is exceeded, then the received/known traffic type cells are routed to node 300b via one or more of the network networks 212a-212c].

Riggan discloses in figure 2 of a topology layout where the access node 300a serves as the source node and access node 300b serves as the destination node. Riggan explicitly fails to explicitly disclose the topology layout including at least source node and at least one destination node that are each respectively one of either directly or indirectly connected to an access node via at least one intermediate node, the access node being capable of setting up a connection both to the packet switching network and to one of the at least one alternate network. Farris discloses in the abstract, figure 3 and respective portions of the specification of a source device 90 connected to SSP13 functioning as an access node capable of setting up a connection both to the packet switching network 50 and to one of the at least alternative network 10. Therefore, it would have been obvious to one of ordinary skills in the art to modify the topology of Riggan to include the separation of source and access node as disclosed in Farris in order

to illustrate several design options or topology modification without departing from the function of the invention wherein the access node/SSP is capable of setting up connections to both packet switching and an alternate network in order to provide high QoS for various traffic types.

Referring to claim 14, Riggan discloses of further comprising the step of using a filter in the access node to check data packets arriving from a source node for the known bit pattern; and initiating the re-routing of the data packets identified with this bit pattern onto an alternate network when a known bit pattern is recognized [see figure 2, 3a,3b and in column 4, lines 6 to column 5, lines 24, incoming traffic, voice, video and data is classified as AAL Type 1, 2,3 / 4 , 5 traffic and the secondary network is chosen by the access node 300a based upon the traffic type of data which is to be transmitted] as claim.

Referring to claim 15, Riggan discloses of further comprising the step of connecting to the source node of either directly or indirectly via at least one intermediate node containing a table for determining traffic path into which the function of the filter is integrated, the table additionally contains bit pattern that can produce a re-routing of the data packet identified with such bit patterns onto an alternate network [as disclosed in figure 2 and column 5, lines 1-42, a controller in node 300a, monitors the source and type of traffic that can produce a re-routing of the data packet identified into an alternate network] as claim.

Referring to claim 16, Riggan discloses of further comprising the step of locating the known bit pattern [traffic type] in the header [5 bytes] of a data packet to be routed via the alternate network [see in figures 1, 6, column 6, lines 17-31, and column 7, lines 5-38] as claim.

Referring to claim 17, Riggan discloses of comprising the step of using the same bit pattern in at least one source node regardless of the respectively request quality [see column 5, lines 1-42, regardless of the request quality, each AAL Traffic Type is routed back through the ATM network, once the bandwidth utilization of the ATM network falls below the predetermined threshold] as claim.

Referring to claim 18, Riggan discloses of further comprising the step of using in at least one source node, bit patterns corresponding to the respectively requested quality [see column 5, lines 1-42, each AAL Traffic Type is routed to a corresponding respective alternate network as long as the quality condition is met] as claim.

Referring to claim 19, Riggan discloses of further comprising the step of using bit pattern of a data packet to produce a re-routing thereof onto at least one alternate network corresponding to the bit pattern with a specific quality [see column 5, lines 1-42, each specific AAL Traffic Type is routed to a corresponding respective alternate network as long as the quality condition is met] as claim.

Referring to claim 20, Riggan discloses further comprising the step of using each recognized bit pattern of a data packet to produce a re-routing thereof onto at least one alternate network with a quality corresponding to the recognized bit pattern [see column 5, lines 1-42, each specific AAL Traffic Type is routed to a corresponding respective alternate network as long as the quality condition is met] as claim.

Referring to claim 21, Riggan discloses of further comprising the step of preventing the re-routing of the data packet onto at lest one alternate network, if after recognition of such a bit pattern of a data packet to be routed via the at least one alternate network in such an access node,

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the at least one alternate network cannot offer the quality corresponding to the bit pattern [see column 5, lines 1-42, each AAL Traffic Type is routed back through the ATM network, once the bandwidth utilization of the ATM network falls below the predetermined threshold, thus preventing rerouting of the data packets onto the respective alternate network for the respective traffic type].

Referring to claim 22, Riggan discloses of further comprising the steps of having the at least one source node send the data packets to communicate a message via the packet-switching network to at least one destination node with respect to the data packets to be routed via the at least one alternate network; and waiting for an acknowledge from the at least one destination node [see figures 2 and 5, where node 300a determined and identifies type of user data and compares with the threshold and routes to the appropriate network based on threshold comparison, then at data is received at the end node 416 and waiting for an ack. From the destination node occurs] as claim.

Referring to claim 23, Riggan discloses of further comprising the step of having the access node 300a connected to the at least one source node [source sends data stream to input to 311] send a message with respect to the assured quality [predetermined threshold] requested by the at least one source node to the network node the at least one alternate network; and waiting for an acknowledgment thereof [see figures 2 and 5, where node 300a determined and identifies type of user data and compares with the threshold and routes to the appropriate network based on threshold comparison, then at data is received at the end node 416 and waiting for an ack. From the destination node occurs] as claim.

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Referring to claim 24, Riggan discloses of further comprising the step of reserving for data packets to be transmitted with an assured quality, at least one logical channel of the packet switching network, in a network constellation in which at least one alternate network is formed [see figure 2 and column 4, lines 6 to column 5, lines 48, where data packet to be transmitted are defined by a AAL Traffic Type and where an access node 300a determines based on bandwidth comparison with a predetermined threshold of an alternate network to transfer the traffic type in order to assure quality] as claim.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703)305-3988, (for formal communications intended for entry)

Or:

(703)305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
September 7, 2004


Ajit Patel
Primary Examiner